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### REMARKS

In the Office Action, the Examiner reviewed claims 1-20 of the above-identified US Patent Application, with the result that independent claims 1 and 14 and their dependent claims 1-3, 5, 9-14, and 18-20 were rejected and dependent claims 4, 6-8, and 15-17 were deemed to recite allowable subject matter. Specifically, claims 1-3 and 9-13 were rejected under 35 USC §102 and §103 in view of U.S. Patent No. 6,586,115 to Rigney et al. (Rigney), and claims 1, 2, 5, 9-14, and 18-20 were rejected under 35 USC §103 in view of U.S. Patent No. 6,025,078 to Rickerby et al. (Rickerby).

In response, Applicant has amended the claims as set forth above. More particularly, independent claims 1 and 14 have been amended to limit the amount of neodymia to 3 weight percent instead of 4 weight percent, and claim 1 has been further amended to limit the amount of lanthana to about 4 weight percent instead of 5 weight percent. Support for the upper limit of 4 wt.% lanthana can be found in Applicant's specification at paragraph [0021]. Support for the upper limit of 3 wt.% neodymia can also be found in Applicant's specification at paragraph [0021], on the basis that Applicant teaches ranges of up to five weight percent and up to about four weight percent neodymia. Applicant acknowledges the newly claimed range of up to 3 weight percent falls within but does not coincide exactly with the ranges disclosed in Applicant's specification. However, Applicant's specification supports the claimed

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range because the claimed range lies within the ranges disclosed in the specification.

See MPEP 2163.05 III., citing *In re Wertheim*, 191 USPQ 90 (CCPA 1976).

In view of the above, Applicant believes that the above amendments do not present new matter, and that the amendments comply with 37 CFR §1.116(a) as being limited to reducing and simplifying the issues remaining in the examination of Applicant's application. Favorable reconsideration and allowance of claims 1-20 are respectfully requested in view of the above amendments and the following remarks.

#### Rejections based on Rigney

Independent claim 1 and its dependent claims 2, 3, and 9-13 were rejected as being anticipated by and unpatentable over Rigney on the basis that Rigney discloses a thermal barrier coating comprising zirconia, up to 3 weight percent yttria, and 5.8 to 22.5 weight percent lanthana. While the Examiner considered Applicant's previous upper limit of about 5 weight percent lanthana to encompass the range taught by Rigney, the Examiner concluded that Applicant's upper limit of 4 weight percent lanthana in independent claim 14 to be patentably distinguishable from the range taught by Rigney. Applicant believes that the newly claimed limitation of up to about 4 weight percent lanthana is also sufficiently different to be patentably distinguishable from Rigney under 35 USC §§102 and 103.

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In view of the above, Applicant respectfully requests withdrawal of the §§102 and 103 rejections based on Rigney.

**Rejection based on Rickerby**

Independent claims 1 and 14 and their dependent claims 2, 5, 9-14 and 18-20 were rejected as being unpatentable over Rickerby on the basis that Rickerby discloses a thermal barrier coating comprising zirconia, 4-20 weight percent yttria, and 5 to 25 weight percent neodymia. As now amended, Applicant's amended independent claims 1 and 14 limit the amount of neodymia to 3 weight percent. Applicant believes that the upper limit of 3 weight percent is sufficiently different (40% lower than the lower limit taught by Rickerby) to be patentably distinguishable from Rickerby under 35 USC §103.

In view of the above, Applicant respectfully requests withdrawal of the §103 rejection based on Rickerby.

**Closing**

For the reasons above, Applicant believes that the claims define patentable novelty over all the references, alone or in combination, of record. It is therefore respectfully requested that this patent application be given favorable reconsideration.

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Should the Examiner have any questions with respect to any matter now of record, Applicant's representative may be reached at (219) 462-4999.

Respectfully submitted,

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